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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,414	12/23/2003	Teruaki Itoh	160-403	7512

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ARLINGTON, VA 22203

EXAMINER

LEVKOVICH, NATALIA A

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/743,414	ITOH, TERUAKI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Natalia Levkovich	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 December 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☒ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being unclear for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 2 recite: "holder moving areas which are provided in respective specific areas of at least two of the belt conveyors and from which corresponding portions including at least the guide rails" are "removed" (claim 1) or "escape from a conveyance path"(claim 2). It is unclear what the above portions should correspond to and what are the structural interrelations between the holder specific areas and the holder moving areas.

Claims 1 and 2 also recite: "a holder holding mechanism which is detachably set in the holder moving areas and which has a pair of parallel guide rail pieces at a lower end,

Art Unit: 1743

the guide rail pieces serving as an alternative to the removed guide rails;”. It is unclear which lower end is meant: the lower end of the holder holding mechanism or the lower end of the holder moving areas”.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as anticipated by Ohashi et al. (US 4999578).

Ohashi discloses an inspection system comprising a plurality of parallel belt conveyors (60) having guide rails 381 and a plurality of system of “traversers” [‘detachable holder holding mechanisms’ – Ex.] moving between ‘specific areas’ of the conveyor system.

The traversers convey articles to different locations of the parallel conveyance paths and are controlled by a controller (See Abstract and Figures 2, 4).

Art Unit: 1743

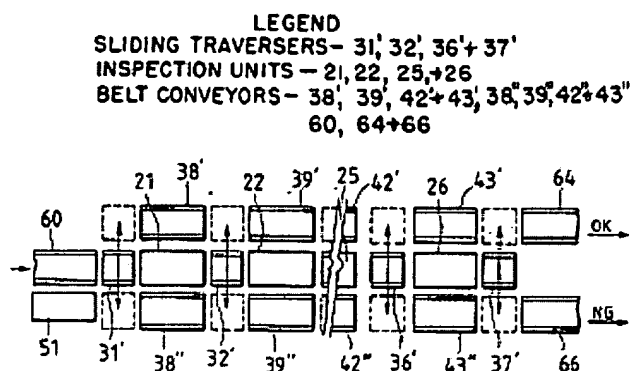
**FIG. 4**

Figure 2 shows the sliding traverser 31 coupled to a 'moving mechanism' comprising a slider 313 "movably fitted on the guide bars 312"; "a cylinder 314 ... horizontally attached to the slider 313. The piston rod 315 of the cylinder 316 is vertically attached to the slider 313. A rest 318, on which the printed circuit board 10 is put, is provided on a rod 317 coupled to a piston which slides in the cylinder 316 to move the rest 318 and down. "Guide rails 319 ["guide rail pieces" – Ex.] are provided on the rest 318". A belt 60 is provided beside the guide rails 319. "Sensors ... are provided for the slider 313 so that the sensors send out signals to control the feed of a working fluid to the cylinder 314 to regulate the range of the movement of the slider to cause the guide rails of the slider" to coincide with the guide rails 381(Col. 3, lines 50-65).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1743

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7 Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohashi et al. (US 4999578) in view of Itoh et al. (US 5445037).

Ohashi does not teach the holder moving system to further comprise a 'shutter' which would close an outlet of the 'holder holding mechanism'.

Itoh et al. disclose a sample sorting apparatus comprising multiple conveyor system. Figure 2 shows a transport lane, sample conveying bodies, and a stopper 61 ['shutter' – Ex.] of the sample sorting apparatus. The stoppers are provided in the vicinity of the inlets or outlets of the transport lanes (See, for example, Col. 4, line 25 and Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed stoppers at the outlet ['carry-out port'] of the 'holder holding mechanism' in the modified apparatus of Ohashi, in order to temporarily accumulate and keep a certain amount of 'specimen conveyance holders' to be moved between parallel conveyors.

**Conclusion**

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:


Hata et al. (US 6079096) - discloses a component mounting apparatus for a conveyor system;

Hamasaki et al. (US 6836960) – discloses a component mounting apparatus;

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalia Levkovich whose telephone number is 571-272-2462. The examiner can normally be reached on Mon-Fri, 8 a.m.-4p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jill Warden  
Supervisory Patent Examiner  
Technology Center 1700